

O R A N G E C O U N T Y



*Our Community. Our Commitment.*

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**Nancy Palmer, City of Laguna Niguel**

**April 10 - 11, 2013**

# Regional Permit Adoption Hearing



# Overview

- Introduction
- Regulatory Issues
- Critical Legal Concerns
- Critical Technical Issues
- Critical TMDL Concerns
- Conclusion & Questions

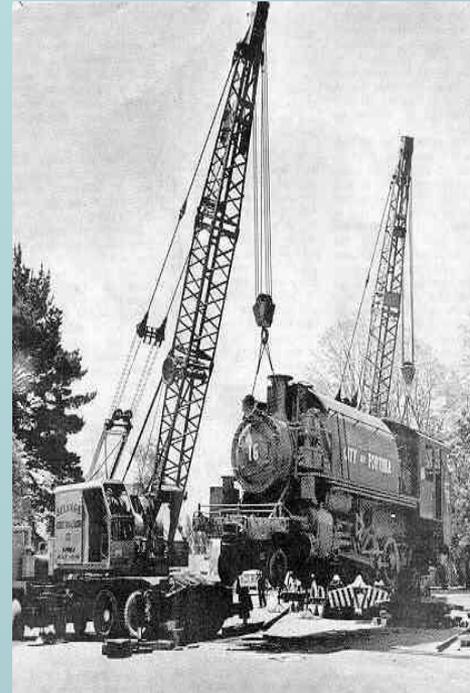
# Stakeholder Process



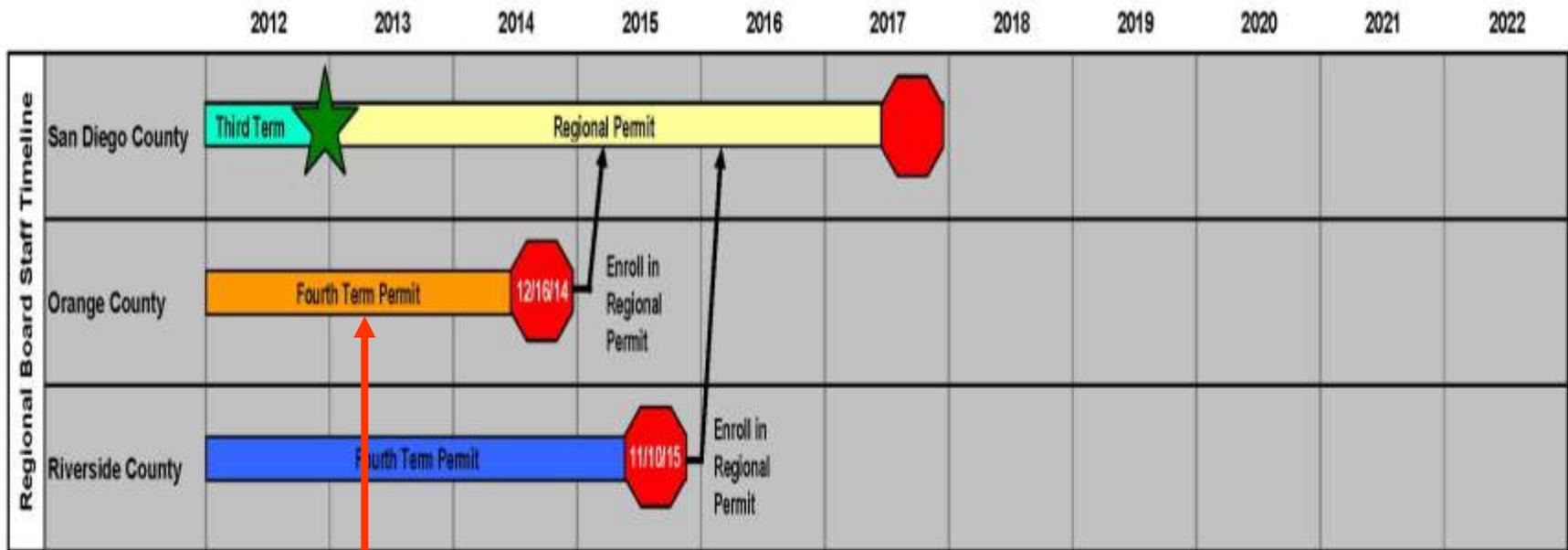
10/31/12



4/10/13



# Timing – Where are We At?



We Are Here

# MS4 Permitting

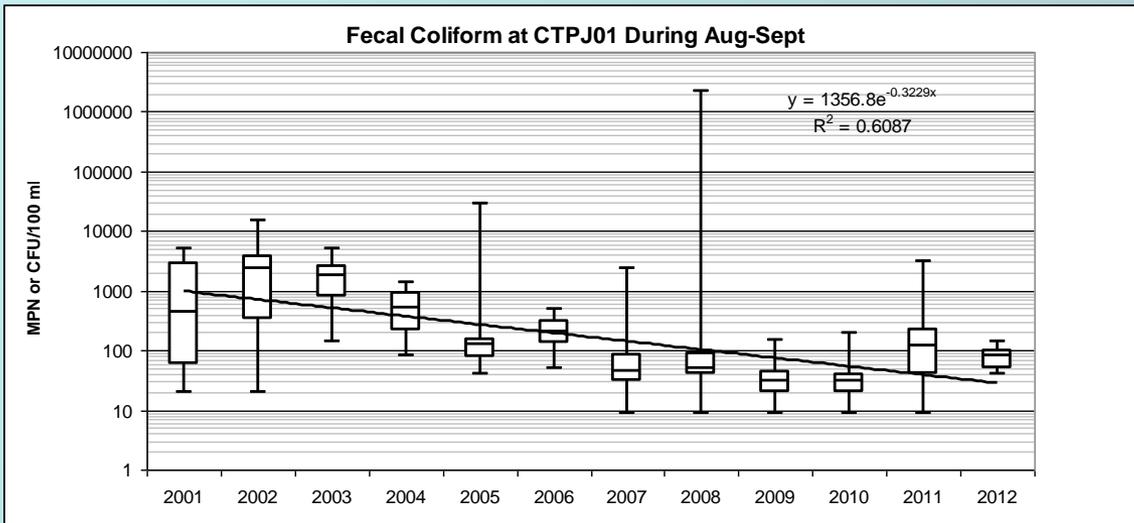
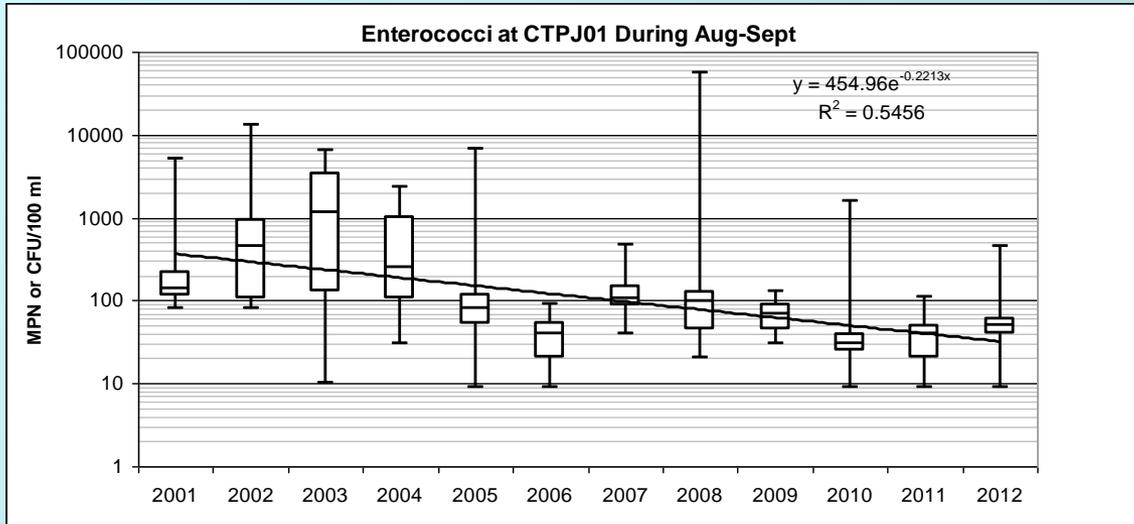
Here's  
Our Plan!



# Where are we at?

- ◎ Bacteria
- ◎ Metals
- ◎ Toxic Organics
- ◎ Receiving Waters
- ◎ Low Impact Development (LID)

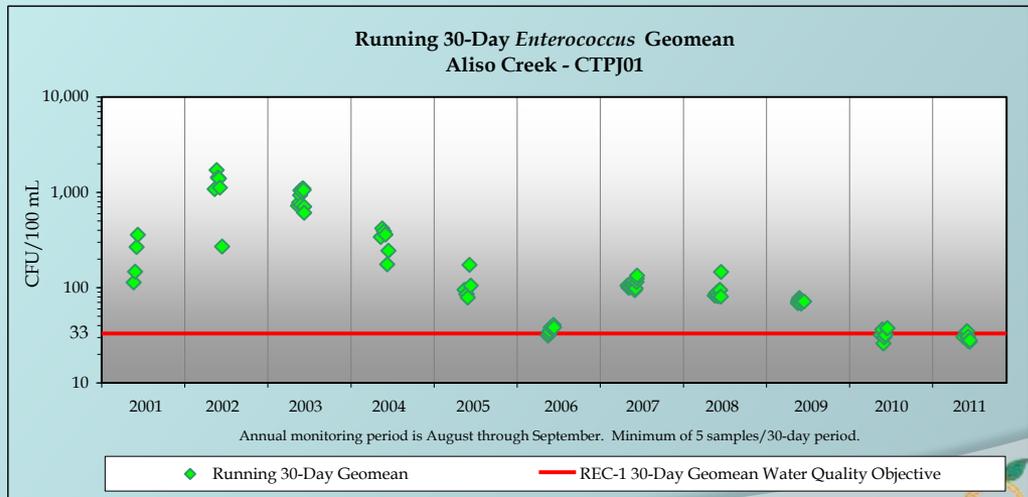
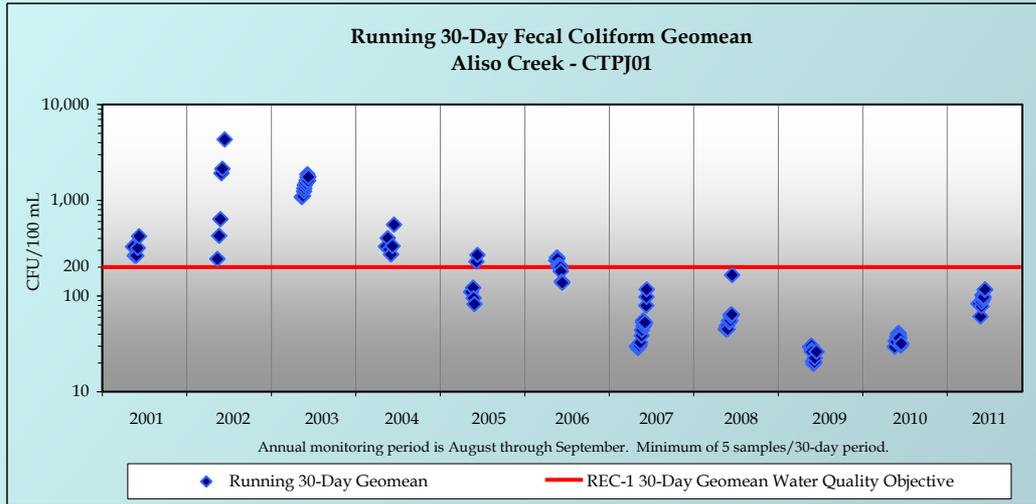
# Bacteria - Where are we at?



- 20% reduction in bacteria concentrations  
In Aliso Creek since 2001

-Reduction in concentrations  
observed in all OC watersheds

# Bacteria - Where are we at?



Lower Aliso Creek Watershed now appears to be attaining REC-1 In dry weather

# Metals - Where are we at?

Table 4: SDR Exceedance of CTR Acute Criteria For Dissolved Metals: 2011-12

Station	Monitoring Program	Sample #		Exceeded Freshwater Aute CTR Criteria												Exceeded Saltwater CTR Acute Criteria											
				Cd		Cu		Ni		Pb		Se		Zn		Cd		Cu		Ni		Pb		Se		Zn	
		Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St	Dry	St		
REF-FC	Bioassessment	1		0	0	0	0	0	0	0	0	0	0	0													
REF-TCAS	Bioassessment	1		0	0	0	0	0	0	0	0	0	0														
SC-MB	Bioassessment	1		0	0	0	0	0	0	0	1	0	0														
SJC-74	Bioassessment	1		0	0	0	0	0	0	0	1	0	0														
SMC01934	Bioassessment	1		0	0	0	0	0	0	0	0	0	0														
SMC01987	Bioassessment	1		0	0	0	0	0	0	0	0	0	0														
ACM1d	Ambient Coastal Receiving Waters	1	2												0	0	0	0	0	0	0	0	0	0	0	0	
LB2d	Ambient Coastal Receiving Waters	1													0	0	0	0	0	0	0	0	0	0	0	0	
LB3d	Ambient Coastal Receiving Waters		2												0	0	0	0	0	0	0	0	0	0	0	0	
SCM1d	Ambient Coastal Receiving Waters	1	2												0	0	0	0	0	0	0	0	0	0	0	0	
SJC1d	Ambient Coastal Receiving Waters		2												0	0	0	0	0	0	0	0	0	0	0	0	
ACJ01	Mass Emissions	2	5	0	0	0	0	0	0	0	0	0	2	0	0	0	1										
LCWI02	Mass Emissions	2	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0										
PDCM01	Mass Emissions	2	5	0	0	0	0	0	0	0	0	0	2	2	0	0											
SDCM02	Mass Emissions	2	5	0	0	0	0	0	0	0	0	0	2	4	0	0											
SJNL01	Mass Emissions		4	0	0	0	0	0	0	0	0	0	0	0	0	0											
TCOL02	Mass Emissions	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0											

Exceedances of CTR for selenium and copper only

No toxicity ever attributed to metals

# Copper - Where are we at?

- ◎ Principal sources of copper in urban runoff: vehicle braking, architectural copper and ornamental ponds/swimming pools.
- ◎ SB346 (Kehoe) 2010: Requires changes in composition of vehicle brakepads for water quality protection

## Vehicle Brakepads

2021 – No more than 5% Cu by weight

2025 – No more than 0.5% Cu by weight

- ◎ CASQA work product

# Toxicity – Where are we at?

## ◎ Summary of Toxicity California Watersheds – SWRCB – 2010

- Of the 992 sites in the assessment, 48% had at least 1 sample in which toxicity was measured
- With the exception of ammonia, all of these ambient TIEs implicated pesticides, primarily OPs and more recently pyrethroids – SWRCB, 2010.



Figure 1: Map of toxicity of all California sites assessed, based on the most sensitive species (fish and DPO) in either water or sediment samples at each site.

# Pesticides - Where are we at?



Urban Surface Water Protection Regulations – DPR - Effective 7/19/12

Regulations will reduce quantity of pyrethroid pesticides carried directly into stormdrains will be reduced by 80-90%  
- Jorgenson, 2011

CASQA work product

# Beaches - Where are we at?



## Heal The Bay 2012 Beach Water Quality Report Card Highlights

**Orange County:** Water quality at beaches in Orange County this past summer was excellent overall with 93% of beaches receiving an A grade.

The historically poor water quality at Doheny Beach continues to show improvement, receiving an A grade for the second consecutive summer. Last summer, two of four monitoring locations at Dana Point's Baby Beach received C grades. Both locations improved to A and B grades in this report

# Coastal Waters – Where are We At?

- ◎ **SCCWRP, 2012 – 40 Years of the CWA**

**Mass emissions of many other pollutants from all major sources combined (large and small coastal POTWs, runoff, and industrial discharges) have also declined substantially since 1971. Toxic contaminants such as trace metals have decreased by up to 99%.**

- ◎ **BEACHES**

**Since the Clean Beaches Initiative started in 2001, the number of beaches with poor grades (D or F) during the summer (AB 411) period has dropped from 12% to 5%, and now nearly 95% of all beaches in southern California receive annual grades of A or B.**

# LID in OC - Where Are We At?



## Water Quality Management Plans

Comprehensive Model WQMP,  
Technical Guidance, Training  
Program and HMP

Developed through a collaborative  
process by experts in LID &  
Hydromodification and Engineering  
Council recognition

284 sites (9,021 acres) installed  
LID BMPs in Santa Ana Region  
in FY2011-12

# Channel Rehabilitation: Where Are We At?







# How It All Adds Up

- ◎ Regional Board Staff lost faith in stakeholder process
- ◎ Current program is working
- ◎ Absent an understanding of progress, efficacy and increasing complexity of MS4 permit cannot be evaluated

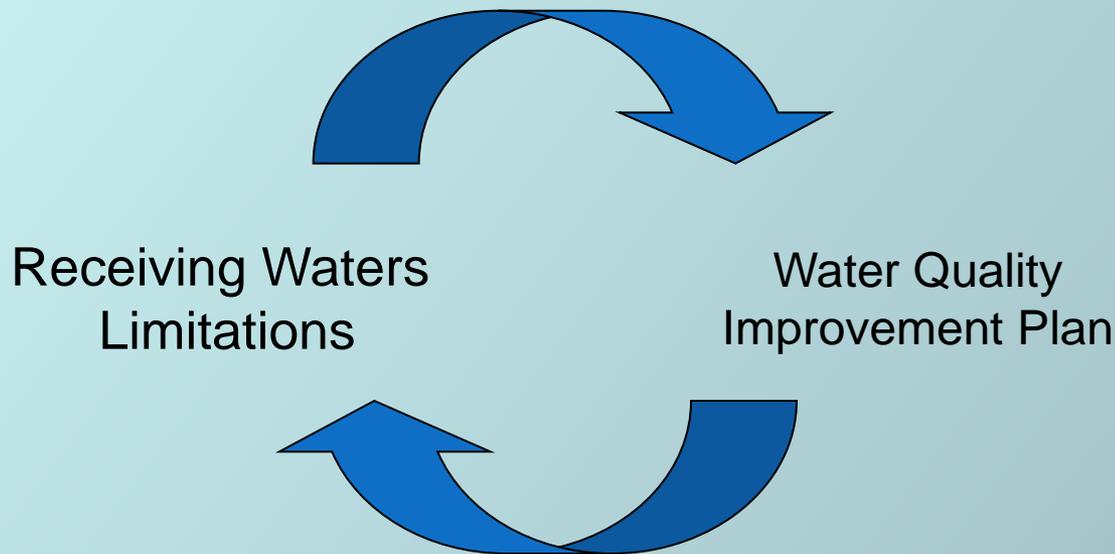
# Changes To Permit & Process

- ◎ Explicitly acknowledge progress – state of the environment
- ◎ Re-rail the stakeholder process
- ◎ Direct staff to coordinate with Region 8 for split jurisdictions

# Critical Regulatory Issues

# Compliance Needs to be Attainable

- Issue: Receiving Water Limitations and Ninth Circuit Decision



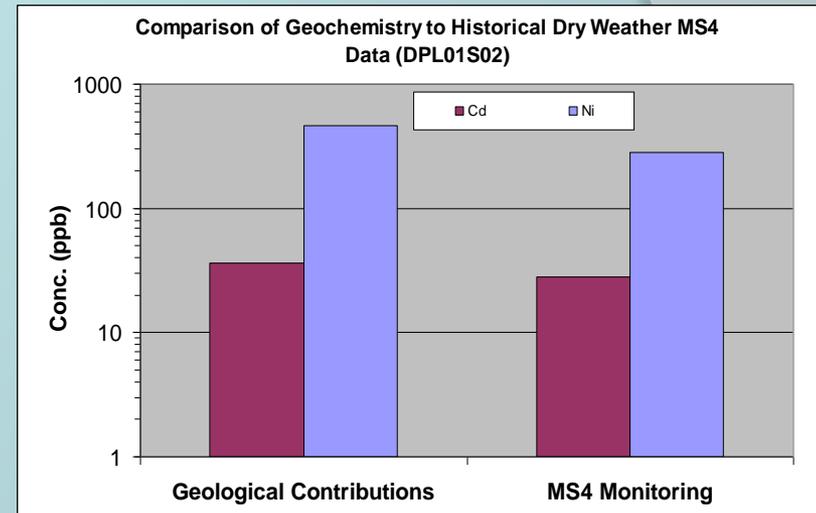
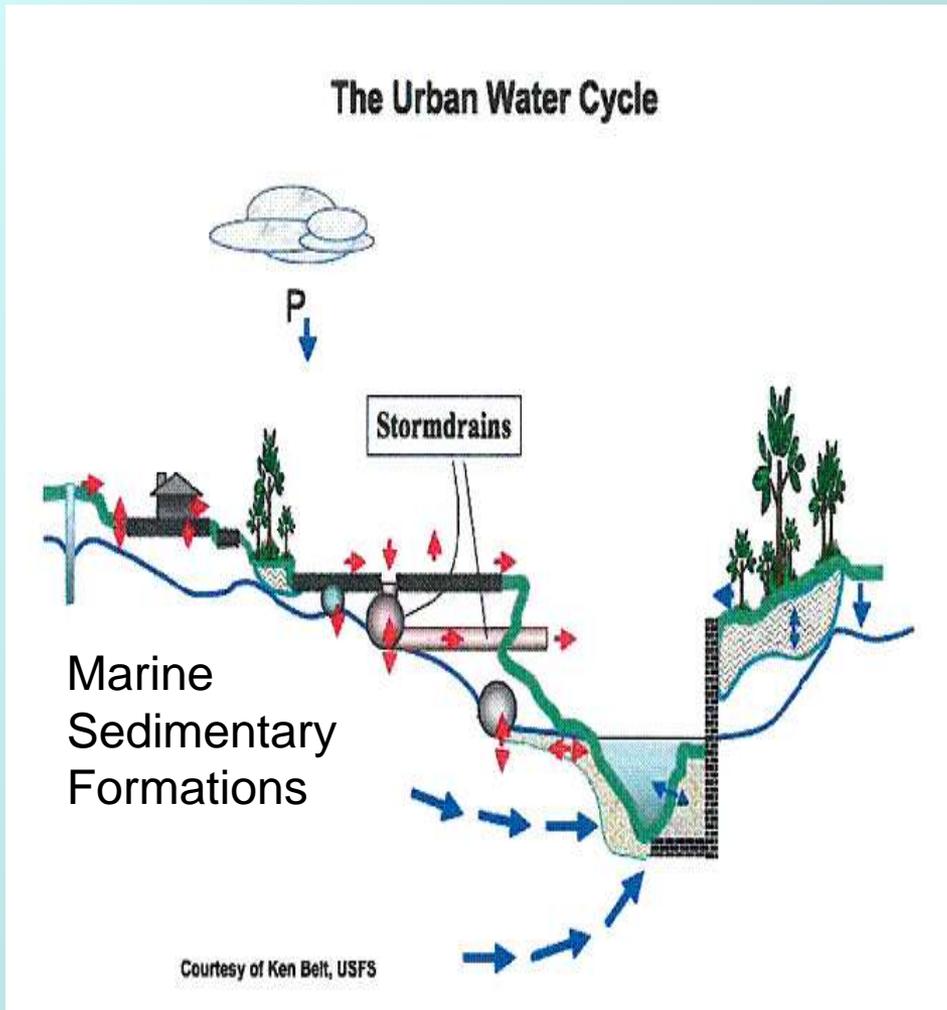
# How It All Adds Up

- ◎ Instantaneous compliance with WQS is unattainable
- ◎ Threat of Third Party Litigation is Real – City of Stockton, City of Malibu & County of LA
- ◎ Updating the Basin Plan is a Priority

# Action Levels

- ◎ Purpose:
  - Guide implementation and measure progress
  - Strategy development and assessment
  - Support the IDDE program
- ◎ Problem: NALs are defined numerics and are inflexible
- ◎ Solution: Allow customization of action levels based on ambient conditions

# How It All Adds Up



Subsurface flow in a pipe must be eliminated or permitted?

# How It All Adds Up

Constituent	NAL Exceedances 2011 - 12		DW Reconnaissance Program Action Level* Exceedances May-September 2010	
	Number	%	Number	%
pH	1	1.5	12	5.1
MBAS	1	1.5	2	0.8
Turbidity	6	8.8	3	1.3
Dissolved Oxygen	1	1.5	2	0.8
Fecal Coliform	36	52.9	0	0
Enterococcus	64	94.1	1	0.4
Total P / Ortho PO4	59	86.8	6	2.5
Total N / Nitrate	63	92.6	22	9.3
Nickel	10	14.5	18	7.6
Cadmium	22	32.4	11	4.7
Zinc	2	2.9		
<b>Total # of Site Visits</b>	<b>68</b>		<b>236</b>	

Where sub-surface flow exceeds NALs, NALs no longer work as investigative tool

# WQIP & JURMP

- ◎ The Water Quality Improvement Plan (WQIP) represents a significant advance for stormwater management.
- ◎ The WQIP framework allows the program to focus on the high priority water quality conditions.
- ◎ Jurisdictional programs provide requirements that must be implemented, regardless of WQIP approach.

# How It All Adds Up

- ⦿ Negates the Intent and Purpose of the WQIP approach – a strategic, priority driven process
- ⦿ OC supports the watershed approach, however the watershed and jurisdictional provisions need to be complementary

# Changes To Permit

- ◎ Defer Adoption pending State Board direction on RWLs or Re-Opener
- ◎ Allow for derivation of NALs from dry weather data set
- ◎ Align WQIP Programs in Provision B with JRMP Programs in Provision E
  - Add language to allow modification and prioritization of Provision E requirements

# Legal Comments

Ryan Baron, County Counsel  
County of Orange

# 1990 EPA Rulemaking

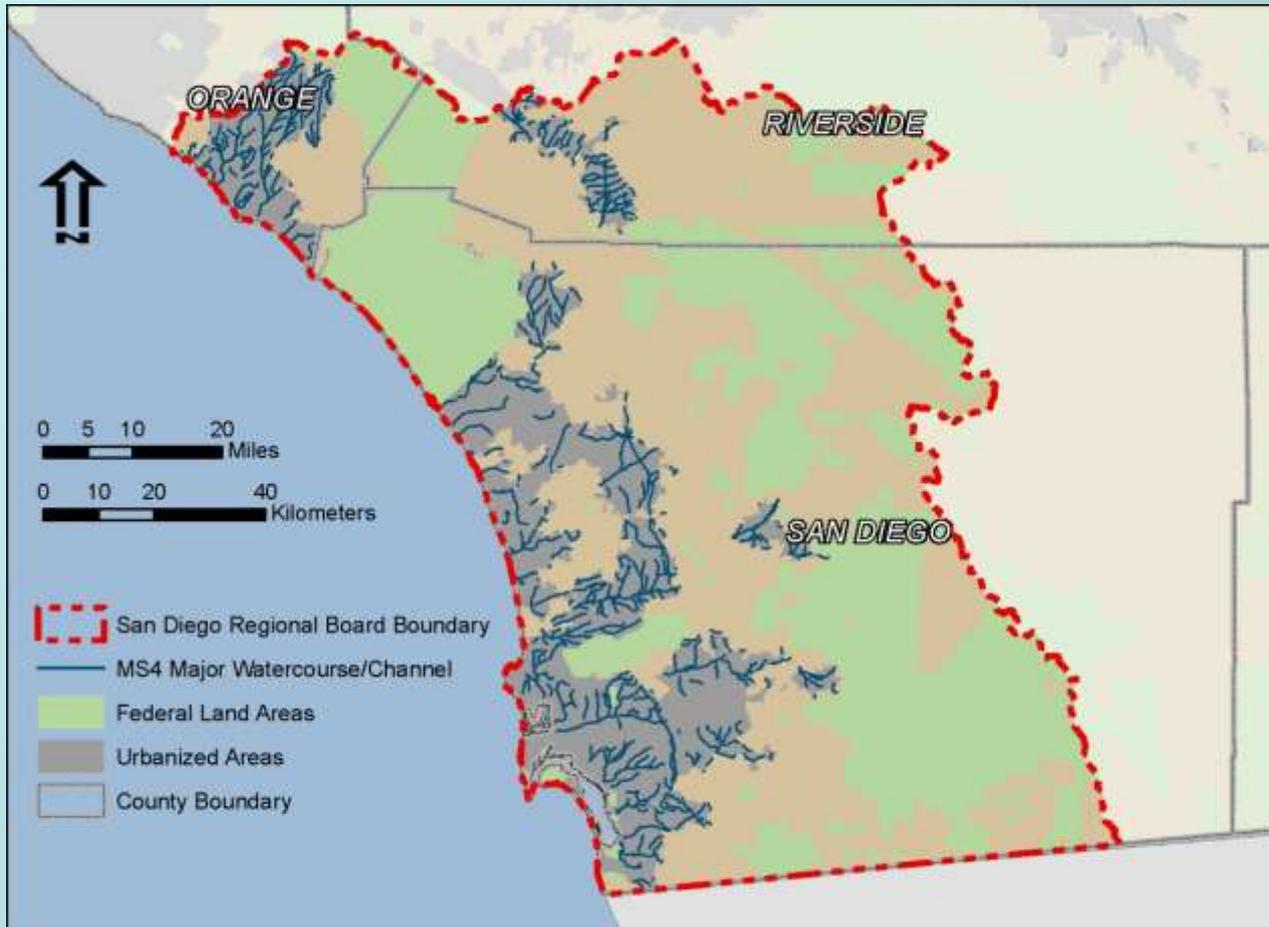
- ⦿ In implementing the permitting system for stormwater discharges called for in the 1987 CWA Amendments, EPA rulemaking examined how to define a “system,” and a “system” would be issued a permit
- ⦿ Rulemaking only examined individually owned MS4s and MS4s within same geographic area defined as watershed or political boundary of the discharger (i.e., state owned roads, county, or regional stormwater authority)
- ⦿ Multiple smaller systems could be defined as a “system” based on common physical factors and a unified stormwater management plan
- ⦿ A region-wide permit would be issued only after an application by a regional stormwater management authority, 40 CFR 122.26(a)(3)(iv)

# No Common Physical Factors

- ⦿ MS4 is not interconnected with Riverside or San Diego
- ⦿ Different political boundaries
- ⦿ No region-wide stormwater management program
- ⦿ Permit recognizes three separate systems and no unifying program (pg. 1)
- ⦿ San Juan Hydrologic Unit drains to Pacific Ocean (pg. 17)
- ⦿ Differences in geography, soil conditions, coastal and inland areas
- ⦿ Differences in drainage patterns, types of discharges, quantity and nature of pollutants
- ⦿ Different census areas
- ⦿ Effectively a general permit
- ⦿ **Single consideration is cost**

# No Basis for Regional Permit

Reason is to reduce internal Board staff costs



# No Application Requirement

- ◎ Application is required 40 CFR 122.21
- ◎ Application contains quantitative data and other evidence by which to make findings, conclusions of law, establish programs, and approve a permit to a system
- ◎ Without it, no substantial evidence
- ◎ ROWD is after the fact

# Exclude Orange County

- OC objects to regional permit inclusion and participates under protest
- Issue a permit to San Diego
- Let OC programs run their course
- Co-permittees will consider region-wide permit in 2014 ROWD
- If region-wide permit is applied for, extend OC permit until 2017 to align permit terms

# WQIP Consultation Panel

- ⦿ Improperly delegates Board approval authority to private parties not regulated by Permit with no limit on discretion and not subject to judicial review
- ⦿ Courts have consistently struck down delegation of quasi-judicial powers to private groups, such as aspects of permitting and licensing
- ⦿ Regional Board responsibility
- ⦿ Existing OC governing structure

# Critical Technical Issues Land Development

Scott Taylor  
RBF

# BMP Treatment Criteria

# New BMP treatment criteria would require significant program changes

- ◎ **Issue:** The new BMP treatment criteria requires retention of 100% of the pollutants from the 24-hr 85<sup>th</sup> percentile storm event instead volume retention in current permit.
- ◎ **Basis:** This would require revising the entire land development program and include:
  - ◎ Significant cost
  - ◎ Staff & applicant time
  - ◎ Revisions to program guidance
    - ◎ Model WQMP
    - ◎ Technical Guidance Document
    - ◎ Training Modules

# BMP Treatment Permit Change

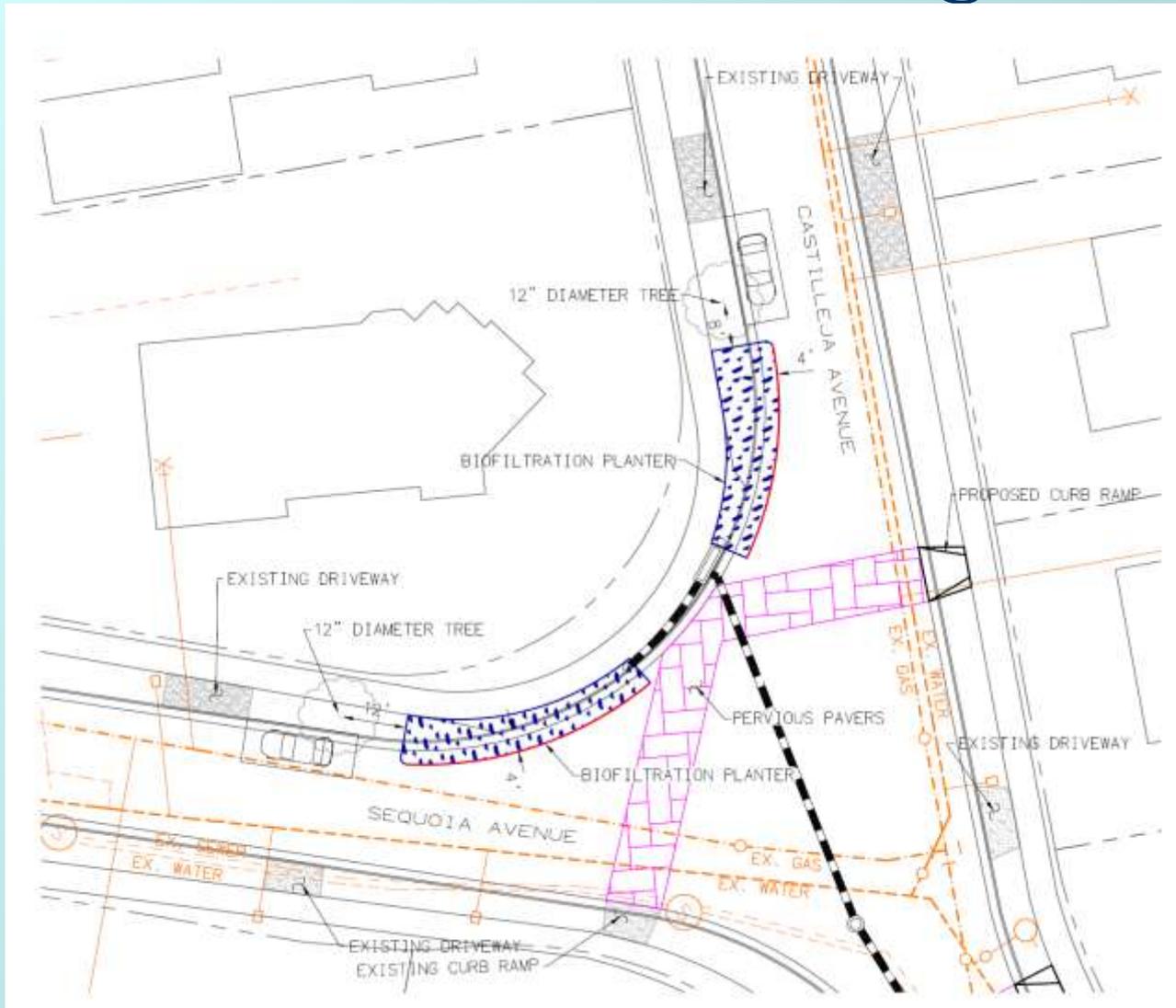
- ◎ **Specify that the current 4<sup>th</sup> term permit criteria & current programs meet compliance**
- ◎ **Direct staff to meet with Copermittees to discuss this issue and work out a solution**
- ◎ **Requested Modification:**
  - **Section E.3.b.(1)(a)**
    - *Each Priority Development Project must be required to implement LID BMPs that are designed to retain (i.e. intercept, store, infiltrate, evaporate, and evapotranspire) onsite 100 percent of the pollutants contained in the volume of storm water runoff produced from a 24-hour 85th percentile storm event (design capture volume);<sup>27</sup>*
    - **Modify Footnote 27: “The current 4<sup>th</sup> term permit BMP criteria and their associated programs for Orange and Riverside Counties meet compliance with this criteria. This volume...”**

# Streets, Roads, Highways

# Land Development requirements must recognize unique aspects of roadways

- ◎ **Issue:** Roadways are fundamentally different than other land development projects, due to specific constraints.
- ◎ **Basis:**
  - ◎ Does not consider roadway constraints; inflexible
  - ◎ Potential to impede retrofit roadway projects
  - ◎ USEPA “Green Streets” - used in all other So Cal MS4 permits - national standard
  - ◎ Costs - not a prudent expenditure of public funds

# Retrofit of Existing Roadways



- ◎ Constraints
  - Slope
  - Existing Drainage/Storm Drain
  - Limited Right-of-Way
  - Physical Constraints
  - Utilities
  - Geotechnical
  - Structural Concerns
  - Street Trees
  - Parking
  - Fire Truck Access

# Sample Roadway WQ Treatment Cost Comparison

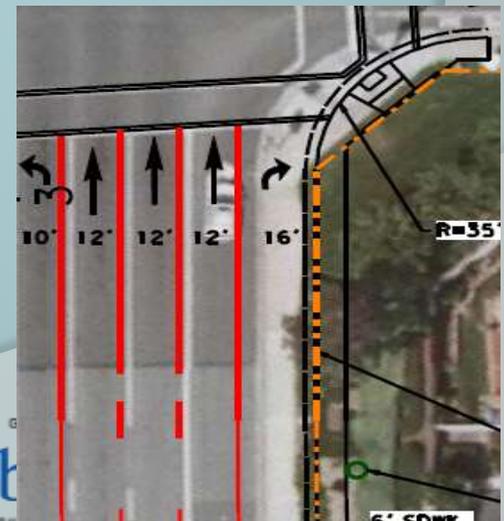
## ◎ **Offsite Retrofit using bioretention**

- Drainage Area: 5,500 sq.ft.
- Total capital cost:\$79,426
- Bioretention cost: \$18,932
- Cost per cubic foot of WQV: **\$61.27 /cu.ft.**
- Treatment per Capital Cost: **23.8%**



## ◎ **Onsite Retrofit using “Green Streets”**

- Drainage Area: 5,500 sq. ft.
- Total capital cost: \$62,444
- Green Street BMP cost: \$1,950
- Cost per cubic foot of WQV: **\$6.31/cu.ft.**
- Treatment per Capital Cost: **3.1%**



# Roadways: Permit Change

- ◎ **Specify that the Copermittees have the option to develop roadway specific post-construction guidance and criteria starting with the USEPA Green Streets Guidance**
  - Convene a stakeholder group (Copermittees, RB Staff, interested parties) to develop the guidance and criteria
  
- ◎ **Requested Modification:**
  - **Section E.3.b.(3)(c) (new exemption)**
    - *Any impervious surface that is 5,000 square feet or more used for the transportation of automobiles, trucks, motorcycles, and other vehicles that follows the post-construction BMP roadway guidance developed by the Copermittees. The Copermittees have the option to develop post-construction BMP roadway guidance which shall meet the following criteria:*
      - *(i) Be developed by the Copermittees in collaboration with Regional Board staff and other interested stakeholders within 18 months of the adoption date of the Tentative Order.*
      - *(ii) Be based on the USEPA guidance regarding Managing Wet Weather with Green Infrastructure: Green Streets<sup>1</sup> to the MEP*

# Other Land Development Issues

# Other Land Development Issues

- ◎ **Provision E.3.b.(1)(b)** – Redevelopment projects that have WQ treatment BMPs should not be subject to the PDP requirements
- ◎ **Provision E.3.c.(2)(a)** – Hydromodification criteria being “pre-development” instead of “pre-project”
- ◎ **Provision E.3.c.(2)(b)** – Hydromodification provisions require sediment supply to be unaffected by the project – “one size fits all” & inconsistent with SCCWRP 667 Report
- ◎ **Provision E.3.c.(1)(d)** – Flow-thru BMPs required for alternative compliance projects
- ◎ **Provision E.3.c.(3)** - Alternative Compliance Projects
  - Required to have greater overall water quality benefit for the WMA;
  - Copermittee temporal mitigation for incomplete alt. compliance projects

Critical Bacteria TMDL  
Concerns  
Baby Beach  
Beaches and Creeks

Nancy Palmer  
City of Laguna Niguel  
*Bacteria TMDL Stakeholder Advisory  
Group*

# We've come a long way...

- ◎ Stakeholders shared many concerns over 10 years of TMDL development and adoptions into the Basin Plan, and over months of initial drafts of Regional MS4 Permit
- ◎ Extensive comments were submitted
- ◎ Several key issues have been resolved
- ◎ Certain issues recognized as needing to be addressed in the TMDL re-opener

# Some Permit Requirements Still Inconsistent with Key Adopted TMDL Basin Plan Provisions

- ⦿ Permit must recognize delisted beaches under both bacteria TMDLs
- ⦿ Receiving water limitations in the permit must be the same as the receiving water limitations in the adopted TMDL
- ⦿ Calculations of exceedance frequencies in the permit must be consistent with the requirements in the TMDLs

# State 303(d) List of Impaired Waters

- ◎ Waterbodies are placed on Statewide 303(d) List of Impaired Waters when water quality doesn't adequately meet objectives
- ◎ Placement on 303(d) List triggers requirement for development of TMDLs
- ◎ Waterbodies demonstrating sufficient and sustained improvement can be formally removed from the State 303(d) List
- ◎ Several waterbodies in the TMDLs have already been de-listed, and more will be

# TMDLs and Basin Plan Amendments Recognize Delisted Beaches

The prioritized list above recognizes that there are segments or areas where bacterial water quality improvements are most likely to occur first (Priority 1), and segments or areas where bacterial water quality improvements are most likely to require more time to achieve (Priority 3). In some cases, receiving water limitations are already being met, resulting in the delisting of those segments or areas from the 2006 and/or 2008 303(d) Lists. The protection of the REC-1 beneficial use of those delisted segments or areas, however, must also be maintained, and those segments or areas must remain off future iterations of the 303(d) List.

“In some cases, **receiving water limitations are already being met**, resulting in the delisting of those segments or areas from the 2006 and/or 2008 303(d) Lists.”

San Diego Basin Plan  
Page 7-106 (20 Beaches TMDL)

# Delisted Waters Still Monitored

Therefore, if the water quality data support delisting before the NPDES requirement revisions are considered, specific objectives of this Implementation Plan are as follows:

1. Persons responsible for monitoring the impaired shoreline segments of Baby Beach and Shelter Island Shoreline Park for bacteria will continue with the monitoring program to ensure REC-1 water quality objectives are maintained.
2. If REC-1 water quality objectives are exceeded, actions outlined in Attachment B of Order Nos. R9-2007-0001 and R9-2002-0001 in section II.C, Coastal Storm Drain Outfall Monitoring, and any subsequent amendment or renewal, will be implemented.
3. If sources of bacteria persist at levels that exceed water quality standards, then the persons responsible will take appropriate actions to identify and eliminate the controllable source or sources of the chronic contamination. If natural and background sources appear to be the sole source of the impairment, application of the NSEA to revise the TMDLs may be appropriate.

If the impaired shoreline segments of BB and SISP remain on or are put back on the List during subsequent iterations of the 303(d) listing process due to impacts from controllable sources of bacteria, the San Diego Water Board will revise the current NPDES requirements and/or issue additional waste discharge requirements to be consistent with these TMDLs.

“if the water quality data support delisting...  
**continue with the monitoring program** to ensure  
REC-1 water quality objectives are maintained”

# Monitoring Confirms Compliance

The TMDLs that have been developed for the Pacific Ocean shorelines are applicable to all the beaches located on the shorelines of the hydrologic subareas (HSAs), hydrologic areas (HAs), and hydrologic units (HUs) listed above. Beginning with the 2008 303(d) List, specific beach segments of the Pacific Ocean shoreline are listed individually. Specific beach segments from some of the Pacific Ocean shorelines listed in the above table have been delisted from the 2008 303(d) list that was approved by the San Diego Board on December 16, 2009, and therefore are not subject to any further action as long as monitoring data continues to support compliance with water quality standards.

“Specific beach segments from some of the Pacific Ocean shorelines listed in the above table have been delisted from the 2008 303(d) list...and therefore are **not subject to any further action as long as monitoring data continue to support compliance with water quality standards.**”

# Draft MS4 Permit Inconsistent with Basin Plan TMDL Provisions

- ◎ Draft Permit text does not acknowledge that waterbodies formally 303(d) de-listed by the State are no longer considered impaired
- ◎ Formal de-listing from 303(d) should be recognized and **added** as a demonstration of compliance with the TMDLs

# Issue #2: Basin Plan Beaches TMDL Receiving Water Limitations

**Table 7-48. Receiving Water Limitations for Beaches**

Indicator Bacteria	Wet Weather Days <sup>a</sup>		Dry Weather Days <sup>b</sup>	
	Wet Weather Numeric Objective <sup>c</sup> (MPN/100mL)	Wet Weather Allowable Exceedance Frequency <sup>d</sup>	Dry Weather Numeric Objective <sup>e</sup> (MPN/100mL)	Dry Weather Allowable Exceedance Frequency
Fecal Coliform	400	22%	200	0%
Total Coliform	10,000	22%	1,000	0%
Enterococcus	104	22%	35	0%

a. Wet weather days defined as days with rainfall events of 0.2 inches or greater and the following 72 hours.

b. Dry weather days defined as days with less than 0.2 inch of rainfall observed on each of the previous 3 days.

c. Wet weather numeric objectives based on the single sample maximum water quality objectives in the California Ocean Plan (2005). Compliance with the wet weather TMDLs in the receiving water is based on the frequency that the wet weather days in any given year exceed the wet weather numeric objective, but 30-day geometric mean must also be met.

d. The wet weather allowable exceedance frequency is set at 22%. In the calculation of the wet weather TMDLs, the San Diego Regional Board chose to apply the 22 percent allowable exceedance frequency as determined for Leo Carillo Beach in Los Angeles County. At the time the wet weather watershed model was developed, the 22 percent exceedance frequency from Los Angeles County was the only reference beach exceedance frequency available. The 22 percent allowable exceedance frequency used to calculate the wet weather TMDLs is justified because the San Diego Region watersheds' exceedance frequencies will likely be close to the value calculated for Leo Carillo Beach, and is consistent with the exceedance frequency that was applied by the Los Angeles Regional Board.

e. Dry weather numeric objectives based on the 30-day geometric mean water quality objectives in the California Ocean Plan (2005). Compliance with the dry weather TMDLs in the receiving water is based on the frequency that the dry weather days in any given year exceed the dry weather numeric objective.

# Inconsistency: Draft Permit Receiving Water Limitations

**Table 6.2a**

*Final Receiving Water Limitations Expressed as Bacteria Densities and Allowable Exceedance Frequencies for Beaches*

<u>Constituent</u>	<u>Wet Weather Days</u>		<u>Dry Weather Days</u>	
	<u>Single Sample Maximum<sup>a,b</sup></u> (MPN/100mL)	<u>Single Sample Maximum Allowable Exceedance Frequency<sup>c</sup></u>	<u>30-Day Geometric Mean<sup>b</sup></u> (MPN/100mL)	<u>30-Day Geometric Mean Allowable Exceedance Frequency</u>
<u>Total Coliform</u>	<u>10,000</u>	<u>22%</u> <b>0%</b>	<u>1,000</u>	<u>0%</u>
<u>Fecal Coliform</u>	<u>400</u>	<u>22%</u> <b>0%</b>	<u>200</u>	<u>0%</u>
<u>Enterococcus</u>	<u>104</u>	<u>22%</u> <b>0%</b>	<u>35</u>	<u>0%</u>

Notes:

**dry weather numeric objectives based on the 30-day geometric mean water quality objectives in the California Ocean Plan (2005).**

c. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days **The 0%**  
**single sample maximum allowable exceedance frequency applies to dry weather days.**

# Basin Plan Creeks TMDL Receiving Water Limitations

Table 7-49. Receiving Water Limitations for Creeks

Indicator Bacteria	Wet Weather Days <sup>a</sup>		Dry Weather Days <sup>b</sup>	
	Wet Weather Numeric Objective <sup>c</sup> (MPN/100mL)	Wet Weather Allowable Exceedance <sup>d</sup> Frequency	Dry Weather Numeric Objective <sup>e</sup> (MPN/100mL)	Dry Weather Allowable Exceedance Frequency
Fecal Coliform	400	22%	200	0%
Enterococcus	61 (104) <sup>f</sup>	22%	33	0%

a. Wet weather days defined as days with rainfall events of 0.2 inches or greater and the following 72 hours.

b. Dry weather days defined as days with less than 0.2 inch of rainfall observed on each of the previous 3 days.

c. Wet weather numeric objectives based on the single sample maximum (or equivalent) water quality objectives in the Water Quality Control Plan for the San Diego Basin (1994). Compliance with the wet weather TMDLs in the receiving water is based on the frequency that the wet weather days in any given year exceed the wet weather numeric objective, but 30-day geometric mean must also be met.

d. The wet weather allowable exceedance frequency is set at 22%. In the calculation of the wet weather TMDLs, the San Diego Regional Board chose to apply the 22 percent allowable exceedance frequency as determined for Leo Carillo Beach in Los Angeles County. At the time the wet weather watershed model was developed, the 22 percent exceedance frequency from Los Angeles County was the only reference beach exceedance frequency available. The 22 percent allowable exceedance frequency used to calculate the wet weather TMDLs is justified because the San Diego Region watersheds' exceedance frequencies will likely be close to the value calculated for Leo Carillo Beach, and is consistent with the exceedance frequency that was applied by the Los Angeles Regional Board.

e. Dry weather numeric objectives based on the 30-day geometric mean (or equivalent) water quality objectives in Water Quality Control Plan for the San Diego Basin (1994). Compliance with the dry weather TMDLs in the receiving water is based on the frequency that the dry weather days in any given year exceed the dry weather numeric objective.

f. A wet weather numeric objective for *Enterococcus* of 104 MPN/100mL may be applied as a receiving water limitation for creeks, instead of 61 MPN/100mL, if one or more of the creeks addressed by these TMDLs (San Juan Creek, Aliso Creek, Tecolote Creek, Forrester Creek, San Diego River, and/or Chollas Creek) is designated with a "moderately to lightly used area" or less frequent usage frequency in the Basin Plan. Otherwise, the wet weather numeric objective of 61 MPN/100mL for *Enterococcus* will be used to assess compliance with the wet weather allowable exceedance frequency.

# Inconsistencies: Draft Permit Receiving Water Limitations

**Table 6.2b**

*Final Receiving Water Limitations Expressed as Bacteria Densities and Allowable Exceedance Frequencies for Creeks*

Constituent	Wet Weather Days		Dry Weather Days	
	Single Sample Maximum <sup>a,b</sup> (MPN/100mL)	Single Sample Maximum Allowable Exceedance Frequency <sup>c</sup>	30-Day Geometric Mean <sup>b</sup> (MPN/100mL)	30-Day Geometric Mean Allowable Exceedance Frequency
Fecal Coliform	400	22% <b>0%</b>	200	0%
Enterococcus	61 (104) <sup>d</sup>	22% <b>0%</b>	33	0%

Notes:

a. During wet weather days, only the single sample maximum receiving water limitations are required to be achieved.

b. During dry weather days, the single sample maximum and 30-day geometric mean receiving water limitations are required to be achieved.

c. The 22% single sample maximum allowable exceedance frequency only applies to wet weather days. **The 0%**

**single sample maximum allowable exceedance frequency applies to dry weather days.**

e. Dry weather numeric objectives based on the 30-day geometric mean (or equivalent) water quality objectives in Water Quality Control Plan for the San Diego Basin (1994). Compliance with the dry weather TMDLs in the receiving water is based on the frequency that

# Draft Permit Inconsistent with Basin Plan TMDL Provisions

- ◎ Establishing single-sample maximum concentrations as a compliance requirement for dry weather contradicts the intent of stakeholder driven TMDL process and the approved Basin Plan
- ◎ Dry weather compliance is based on 30-day geomeans and loading, not on single samples
- ◎ This unwarranted embellishment should be **deleted** from the Draft Permit

# Issue #3: Basin Plan TMDL Provisions for Wet Weather Data Extrapolation

creek). Because of the many issues related to collecting wet weather samples from multiple sites within a short time frame, dischargers are expected to develop a wet weather monitoring and sampling approach in their BLRPs or CLRPs. If only one sample is collected for a storm event, the bacteria density for every wet weather day associated with that storm event shall be equal to the results from that one sample. If more than one sample is collected for a storm event, but not on a daily basis, the bacteria density for all the wet weather days not sampled shall be equal to the highest bacteria density result reported from samples collected. The exceedance frequency shall

“If only one sample is collected for a storm event, the bacteria density for every wet weather day **associated with that storm event** shall be equal to the results from that one sample.”

***Scientifically debatable, but issue deferred at the BPA adoption to the 5-year re-opener , pending better research data findings***

# Inconsistency: Draft Permit Wet Weather Data Extrapolation

- [a] If only one sample is collected for a storm event, the bacteria density for every wet weather day associated with that storm event must be assumed to be equal to the results from the one sample collected;
- [b] If more than one sample is collected for a storm event, but not on a daily basis, the bacteria density for all wet weather days of the storm event not sampled must be assumed to be equal to the highest bacteria density result reported from the samples collected;
- [c] If there are any storm events not sampled, the bacteria density for every wet weather day of those storm events must be assumed to be equal to the highest bacteria density result reported from wet weather samples collected; and

# Embellishment Unwarranted and Unvetted by Process or Science

- Assuming all unsampled storm events have the highest concentration of any samples is an *unwarranted punitive expansion* of the approved TMDL Basin Plan provision
- TMDL BPA instead provides for Permittees to develop a sampling plan in CLRP
- This unvetted provision should be **deleted** from the Draft Regional MS4 Permit

# How It All Adds Up

- ◎ Creates Permit requirements that are inconsistent with the San Diego Basin Plan, inconsistent with the Regional Board intent, and ***go beyond*** the requirements of the adopted TMDLs
- ◎ ***Draft Permit requirements should be corrected prior to adoption***

# Requested Corrections: Consistency between Tentative Order and Basin Plan

- ◎ Recognize delisted beaches consistent with the Basin Plan: **delisted beaches are compliant**
- ◎ Apply receiving water limitations consistent with Basin Plan: **dry weather receiving water limitations is geomean standard only**
- ◎ Wet weather data extrapolation consistent with Basin Plan: **remove provision pertaining to non-sampled storm events**

# Correction Request

## ◎ Requested addition to Baby Beach TMDL compliance provisions

- Add a new provision as Attachment E, Provision 5.b(3)(h):
  - “The waterbody is delisted from the 303(d) list”
- Add a new provision as Attachment E, Provision 5.c(1)(b)(ix):
  - “The waterbody is delisted from the 303(d) list”

# Correction Request (cont'd)

- ◎ **Requested addition to Regional Permit Beaches and Creeks Bacteria TMDL compliance provisions:**
  - Add a new Final TMDL Compliance Determination provision as Attachment E, Provision 6.b(3)(g):
    - “The waterbody is delisted from the 303(d) list”
  - Add a new Interim TMDL Compliance Determination provision as Attachment E, Provision 6.c(3)(i):
    - “The waterbody is delisted from the 303(d) list”

# Correction to Final Receiving Water Limitations

- ◎ Replace Table 6.2a with Table 7-48 from the San Diego Basin Plan
- ◎ Replace Table 6.2b with Table 7-49 from the San Diego Basin Plan

# Correction Requested to Wet Weather Data Extrapolation

- Delete Provision E.6.d(1)(c)(iii)[c]

# Conclusion

There are too many issues to resolve today

Direct staff to go back to work with the stakeholders to bring back a revised Tentative Order with broad support.



# Questions